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Research Interests	Climate dynamics and predictability. Ocean/atmosphere dynamics and coupling. Impact of climate change and variability.
Education	Ph.D. Physical Oceanography Apr., 2000 University of Washington Seattle, WA Thesis title: "Sub-seasonal wind variability and El Niño"
	M.S. Applied Mathematics Feb. 1999 University of Washington Seattle, WA
	M.S. Physical Oceanography Dec. 1996 University of Washington Seattle, WA
	B.A. Mathematics May 1994 Rutgers University New Brunswick, NJ
Professional experience	Jun. 2006 – Present Research Oceanographer Princeton, NJ NOAA – Geophysical Fluid Dynamics Laboratory
	Nov. 2003 – Jun. 2006 UCAR Visiting Scientist Princeton, NJ NOAA – Geophysical Fluid Dynamics Laboratory
	Sep. 2004 – Jan. 2005 Lecturer New Brunswick, NJ Rutgers University, Environmental Sci. 323 – Atmospheric Thermodynamics.
	May 2001 – Nov. 2003 Research Scientist Seattle, WA University of Washington, Joint Institute for the Study of the Atmosphere and Oceans
	May 2000 – Apr. 2001 Postdoctoral Research Associate Seattle, WA University of Washington, Department of Atmospheric Sciences / Joint Institute for the Study of the Atmosphere and Oceans
	Sep. 1994 – Apr. 2000 Research Assistant Seattle, WA University of Washington, School of Oceanography / Joint Institute for the Study of the Atmosphere and Oceans
	Oct. 1993 – Sep. 1994 Research Assistant New Brunswick, NJ Institute for Marine and Coastal Sciences, Rutgers University
	Jun. 1993- Aug. 1993 Summer Research Fellow New Brunswick, NJ Institute for Marine and Coastal Sciences, Rutgers University

Awards received	<p>AGU Editor's Citation for Excellence in Refereeing for Geophys. Res. Lett., 2008.</p> <p>NOAA/OAR Outstanding Paper of the Year, 2007</p> <p>Presidential Early Career Award for Scientists and Engineers (PECASE), 2004-9.</p> <p>AGU Editor's Citation for Excellence in Refereeing for Geophys. Res. Lett., 2004.</p> <p>NASA Space Grant Scholarship, 1994-1996.</p> <p>Cook College, Rutgers University Marine Sciences Student of the Year, 1994.</p> <p>New Jersey Department of Education Garden State Scholar Scholarship, 1990-1994.</p>
Community Service	<p>Associate Editor, Journal of the Atmospheric Sciences.</p> <p>Associate Editor, Journal of Climate.</p> <p>Book Review Editor, Int. J. of Climate Change Strategies and Management.</p> <p>NOAA-OAR Climate Observing Systems Council (2009-)</p> <p>U.S.-CLIVAR Predictability, Prediction, and Applications Interface Panel (2009-)</p> <p>CLIVAR Asian/Australian Monsoon Panel (2008-)</p> <p>CLIVAR Indian Ocean Panel (2007-)</p> <p>AGU/TOS/ASLO Ocean Sciences 2006 Meeting Scientific Organizing Committee.</p> <p>Judge 2005 NAACP ACT-SO Academic Competition.</p> <p>Speaker: Elementary through High School.</p> <p>Article reviews for: J. Physical Oceanography, Monthly Weather Review, J. of Geophys. Res., Geophys. Res. Lett., J. Climate, J. Atmospheric Sciences, Nature, J. Oceanic and Atmospheric Tech., Remote Sensing of the Environment, Tellus.</p> <p>Proposal reviews for: NOAA, NSF, NASA, DOE.</p>
Professional Organizations	<p>American Geophysical Union. American Meteorological Society.</p> <p>The Oceanography Society</p>
Academic Committees	<p>Ian Lloyd, Princeton U., AOS Program, Ph.D. Thesis Advisor.</p> <p>Pedro DiNezio, U. Miami, RSMAS, Ph.D. Committee Member.</p>
Languages	<p>Fluent in Spanish (lived in Venezuela from age 1 to 14) and Italian. Working knowledge of French.</p>
Interests and activities	<p>Soccer, snowboarding, mountain biking, SCUBA.</p>

Publications

- Vecchi, G.A., & T.R. Knutson (2010): Historical North Atlantic Hurricane Activity. *Geophys. Res. Lett.* (*in preparation*).
- Vecchi, G.A., M. Zhao, I.M. Held, S.-J. Lin, & I.D. Lloyd (2010): Impact of Sea Surface Temperature on Tropical Cyclones in a 100km Global Atmospheric General Circulation Model. *J. Climate* (*in preparation*).
- Vecchi, G.A., M. Zhao, H. Wang, G. Villarini, A. Rosati, A. Kumar, I.M. Held and R. Gudgel (2010): Hybrid Statistical-Dynamical Predictions of Seasonal North Atlantic Hurricane Activity (*submitted*).
- Villarini, G., G.A. Vecchi, T.R. Knutson, M. Zhao and J.A. Smith (2010): Reconciling Differing Model Projections of Changes in the Frequency of Tropical Storms in the North Atlantic Basin in a Warmer Climate. (*submitted*).
- Lloyd, I.D., & G.A. Vecchi (2010): Oceanic control on hurricane intensity. *J. Clim.* (*submitted*).
- Zhao, M., I.M. Held, and G.A. Vecchi (2010): Seasonal predictability of northern hemisphere hurricanes in an SST-forced AGCM. *Mon. Wea. Rev.* (*submitted*).
- Seager, R., N. Naik, and G.A. Vecchi (2010): Thermodynamic and dynamic mechanisms for large-scale changes in the hydrological cycle in response to global warming. *J. Climate* (*accepted*).
- Collins, M., S-I An, W. Cai, A. Ganachaud, E. Guilyardi, F-F Jin, M. Jochum, M. Lengaigne, S. Power, A. Timmermann, G. Vecchi and A. Wittenberg (2010): The impact of global warming on the tropical Pacific and El Niño. *Nature Geosci.* (*submitted*).
- Seager, R. and G.A. Vecchi (2010): Greenhouse warming and the 21st Century hydroclimate of southwestern North America. *Proc. Nat. Acad. Sciences*, (*in press*).
- DiNezio, P. A. Clement, and G.A. Vecchi (2010): Is ENSO an Appropriate Analogue for Tropical Pacific Climate Change? *EOS, Trans. Amer. Geophys. Union*, (*in press*).
- Villarini, G., G.A. Vecchi and J.A. Smith (2010): Modeling of the Dependence of Tropical Storm Counts in the North Atlantic Basin on Climate Indices. *Mon. Wea. Rev.* (*in press*).
- Harrison, D.E., A.M. Chiodi, and G.A. Vecchi (2010): Effects of surface forcing on the seasonal cycle of the eastern equatorial Pacific. *J. Marine Research*. (*in press*).
- Vecchi, G.A. and A.T. Wittenberg (2010): El Niño and our future climate: where do we stand? *Wiley Interdisciplinary Reviews: Climate Change*, doi: 10.1002/wcc.33.
- Bender, M.A., T.R. Knutson, R.E. Tuleya, J.J. Sirutis, G.A. Vecchi, S.T. Garner, and I.M. Held (2010): Model-Projected Impact of Anthropogenic Warming on Late 21st Century Intense Atlantic Hurricane Activity. *Science*.
- Lloyd, I.D., & G.A. Vecchi (2010): Submonthly Indian Ocean cooling events and their relation to large-scale conditions. *J. Climate*, doi: 10.1175/2009JCLI3067.1.
- Landsea, C.W., G.A. Vecchi, L. Bengtsson & T.R. Knutson (2010): Impact of Duration Thresholds on Atlantic Tropical Cyclone Counts. *J. Climate*, doi: 10.1175/2009JCLI3034.1.
- Kirtman, B. and G.A. Vecchi (2010): Why Climate Modelers Should Worry About Atmospheric and Oceanic Weather. WMO Monograph: "The Global Monsoon System: Research and Forecast 2nd Edition"
- Xie, S.P., C. Deser, G.A. Vecchi, J. Ma, H. Teng and A.T. Wittenberg (2010). Global Warming Pattern Formation: Sea Surface Temperature and Rainfall. *J. Climate*, doi: 10.1175/2009JCLI3329.1.

- Zheng, X-T, S-P Xie, G.A. Vecchi, Q. Liu, and J. Hafner (2010). Indian Ocean dipole response to global warming: Analysis of ocean-atmospheric feedbacks in a coupled model. *J. Climate*, doi: 10.1175/2009JCLI3326.1.
- Zhao, M., I.M. Held, S.-J. Lin & G.A. Vecchi (2009): Simulations of global hurricane climatology, interannual variability, and response to global warming using a 50km resolution GCM. *J. Climate*, doi: 10.1175/2009JCLI3049.1.
- DiNezio, P.N., A.C. Clement, G.A. Vecchi, B.J. Soden, B.P. Kirtman & S.-K. Lee (2009): Climate Response of the Equatorial Pacific to Global Warming. *J. Climate*, **22**(18), 4873-4892.
- Lengaigne, M., & G.A. Vecchi (2009): Contrasting the termination of moderate and extreme El Niño events in Coupled General Circulation Models. *Clim. Dyn.* DOI:10.1007/s00382-009-0562-3.
- McPhaden, M.J., et al. (2009): Ocean-Atmosphere Interactions During Cyclone Nargis. *EOS Trans. Amer. Geophys. Union*, **90**(7), 53-60.
- Vecchi, G.A., K.L. Swanson & B.J. Soden (2008): Whither Hurricane Activity? *Science*, **322**(5902), 687. DOI: 10.1126/science.1164396.
- Vecchi, G.A., & T.R. Knutson (2008). On Estimates of Historical North Atlantic Topical Cyclone Activity *J. Climate*, **21**(14), 3580-3600.
- Knutson, T.R., J.J. Sirutis, S.T. Garner, G.A. Vecchi & I.M. Held (2007). Simulated impact of 21st Century warming on Atlantic hurricane activity. *Nature Geoscience*, doi:10.1038/ngeo202.
- Vecchi, G.A., A. Clement & B.J. Soden (2008). Examining the Tropical Pacific's Response to Global Warming. *EOS, Trans. Amer. Geophys. Union*, **89**(9), pp.81,83.
- Song, Q., G.A. Vecchi & A. Rosati (2007). Predictability of Indian Ocean Sea Surface Temperature Anomalies in the GFDL Coupled Model. *Geophys. Res. Lett.*, **5**, L02701, doi:10.1029/2007GL031966.
- Vecchi, G.A., & B.J. Soden (2007). Effect of remote sea surface temperature change on tropical cyclone potential intensity. *Nature*, **450**(7172), pp 1066-1070, doi:10.1038/nature06423.
- Vecchi, G.A., & B.J. Soden (2007). Global Warming and the Weakening of the Tropical Circulation. *J. Climate*, **20**(17) 4316-4340.
- Vecchi, G.A., & B.J. Soden (2007). Increased tropical Atlantic wind shear in model projections of global warming. *Geophys. Res. Lett.*, **34**, L08702, doi:10.1029/2006GL028905.
- Vecchi, G.A., & M. Harrison (2007). An Indian Ocean Observing System Simulation Experiment. *J. Climate*, **20**, 3300-3319.
- Song, Q.N., G.A. Vecchi, & A. Rosati (2007). Indian Ocean Variability in the GFDL CM2 Coupled Climate Model. *J. Climate*, **20**, 2895-2916.
- Song, Q.N., G.A. Vecchi, & A. Rosati (2007). Impact of the Indonesian Throughflow on Climate Variability in the GFDL Coupled Climate Model. *J. Climate*, **20**, 2434-2451.
- Seager, R., et al (2007). Model projections of an imminent transition to a more arid climate in southwestern North America. *Science* **316**, 1181-1184.
- Lu, J., G.A. Vecchi & T.J. Reichler (2007). Expansion of the Hadley cell under global warming. *Geophys. Res. Lett.* **34**, L06805, doi:10.1029/2006GL028443.
- Vecchi, G.A., B.J. Soden, A.T. Wittenberg, I.M. Held, A. Leetmaa & M.J. Harrison (2006): Weakening of Tropical Pacific Atmospheric Circulation due to Anthropogenic Forcing. *Nature*, **441**(7089), 73-76. doi:10.1038/nature04744.

- Vecchi, G.A. (2006). The termination of the 1997-98 El Niño. Part II: Mechanisms of Atmospheric Change. *J. Climate*, **19**(12), 2647-2664.
- Vecchi, G.A., & D.E. Harrison (2006). The termination of the 1997-98 El Niño. Part I: Mechanisms of Oceanic Change. *J. Climate*, **19**(12), 2633-2646.
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- Vecchi, G.A. (2000). Tropical Pacific sub-seasonal wind variability and El Niño. Ph.D. Dissertation, University of Washington.
- Vecchi, G.A. & D.E. Harrison (2000). Tropical Pacific sea surface temperature anomalies, El Niño and equatorial westerly wind events. *J. Climate*, **13**(11), 1814-1830.
- Harrison, D.E. & G.A. Vecchi (1999). On the termination of El Niño. *Geophys. Res. Lett.* **26**(11), 1593-7.

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